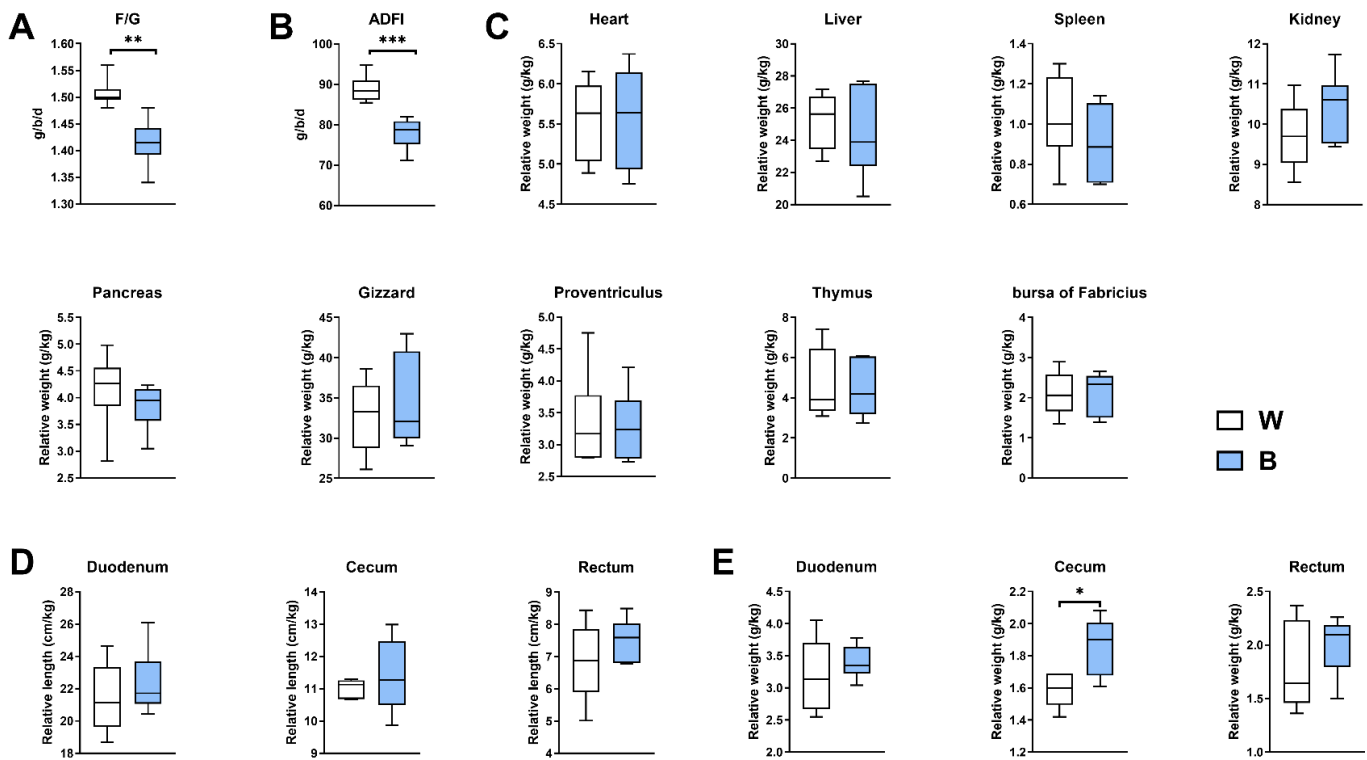
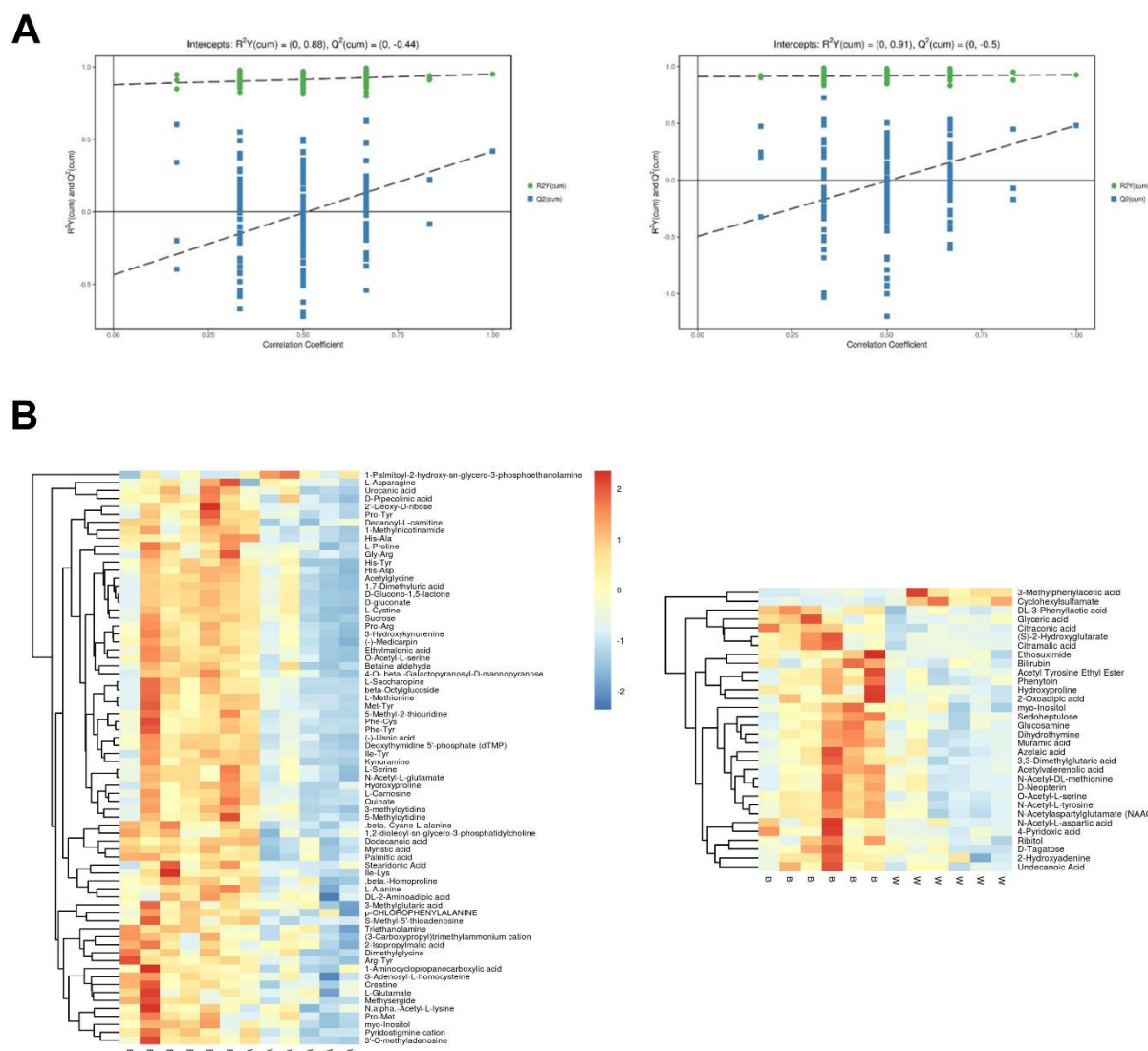


Supplementary Material

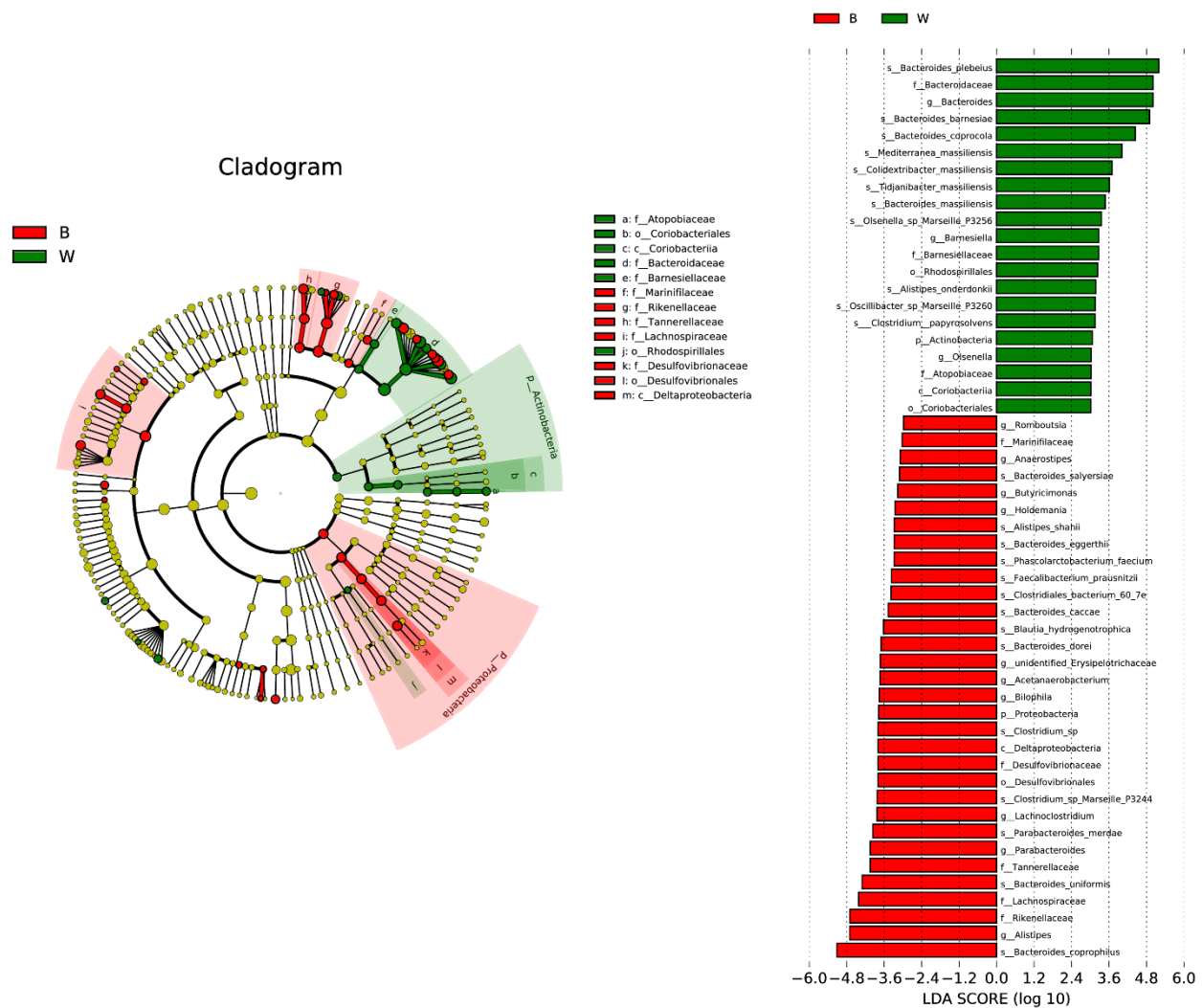
Supplementary Figures



Supplementary Figure 1. (A - B) Effect of 460 nm LED blue light exposure treatment on growth performance in ducks. (C) Effect of 460 nm LED blue light exposure treatment on organ index in ducks. (D - E) Effect of 460 nm LED blue light exposure treatment on the relative length and weight of the intestine.



Supplementary Figure 2. (A) Permutation test of OPLS-DA model showing the stability of the model ($n = 6$). (B) Heatmaps represent the differential metabolites identified between the blue light exposure group vs the white light exposure group ($n = 6$).



Supplementary Figure 3. LDA Effect Size analysis of microbial communities in the cecum from white light exposure groups and blue light exposure (n=6).